

## **GARDENING HOSE REEL**

### **RELATED U.S. APPLICATIONS**

Not applicable.

### **STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT**

Not applicable.

### **REFERENCE TO MICROFICHE APPENDIX**

Not applicable.

### **FIELD OF THE INVENTION**

[0001] The present invention relates generally to gardening hose reel, and more particularly to gardening hose reel which water inlet terminal is designed with rotary connector for innovative design.

### **BACKGROUND OF THE INVENTION**

[0002] Gardening hose reel is an instrument that is designed for convenient storage of a gardening hose. The traditional gardening hose reel comprises a notch for roll-up of a gardening hose. The water inlet terminal of the gardening hose can be pulled outward from the center of said notch, the water outlet terminal can be pulled outward from the seam of the other end of the reel. Problems arise from the traditional design concern the following.

**[0003]** Given the different pulling directions of the water inlet and outlet terminals, when the water outlet terminal is pulled outward, the water inlet terminal rotates radially as a direct result. If the water inlet terminal is affixed to the faucet, the gardening then appears in spiral and twisted shape. Therefore, the use of a traditional gardening reel requires pulling the water outlet terminal to the desired length, then affix the water inlet terminal to the faucet. Otherwise, spiral and twisted shapes would occur when the gardening hose is pulled. It not only results in obstruction of water flow but also leads to damage to the gardening hose.

**[0004]** Therefore, in regards to the above-mentioned problems, an innovative design to improve the spiral and twisted shape of the gardening hose needs to be concerned.

#### BRIEF SUMMARY OF THE INVENTION

**[0005]** The benefits of the prevent invention are as follows:

1. It provides an innovative rotary connector 40 design of the reel notch 11 outlet 12 at the water inlet terminal 21 of the gardening hose 20.

2. When the water outlet terminal 22 of the gardening hose 20 is pulled outward, the water inlet terminal 21 turns with the rotary connector 40 to inhibit linkage with the water inlet terminal 21 of the gardening hose 20 so as to prevent the gardening hose 20 from spiral and twisted shape.

**[0006]** The improved functions of the prevent invention are as follows:

**[0007]** The main frame 10 can be placed on a horizontal rotary frame 50 can rotate along pulling direction of the water outlet terminal 22 of the gardening hose 20 for smooth usage.

## BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0008] FIG. 1 shows a perspective view of the preferred embodiment of the present invention.

[0009] FIG. 2 shows an exploded view of the rotary connector of the present invention .

[0010] FIG. 3 shows a schematic drawing of the assembled rotary connector of the present invention.

[0011] FIG. 4 shows the present invention in operation.

[0012] FIG. 5 shows an exploded view of the placement of the main frame on the reel frame.

[0013] FIGS. 6-7 show the structure presented in FIG. 5 in operation.

[0014] FIG. 8 shows a perspective view of the assembly of the present invention.

[0015] FIG. 9 shows a cross-section view of the assembly of the present invention.

## DETAILED DESCRIPTION OF THE INVENTION

[0016] The features and the advantages of the present invention will be more readily understood upon a thoughtful deliberation of the following detailed description of a preferred embodiment of the present invention with reference to the accompanying drawings.

[0017] As shown in FIG. 1, a gardening hose reel embodied in the present invention comprises a main frame 10, which comprises a reel notch 11, provided for a gardening hose 20 to be contained within; the water inlet terminal 21 of the gardening hose 20 is pulled outward from the central outlet 12 of the reel notch 11, then connected to the faucet 30; the other end of the main frame 10 contains a through notch 13 provided for the water outlet terminal 22 of the gardening hose 20 to go through.

The features of the present invention include:

[0018] the water inlet terminal 21 of the gardening hose 20 contains a rotary connector 40 at the outlet 12 of the reel notch 11. When the water outlet terminal 22 is pulled outward (as shown in FIG.

4), the water inlet terminal of the gardening hose 20 turns with the rotary connector 40 to inhibit linkage with the water inlet terminal 21 of the gardening hose 20 so as to prevent the gardening hose 20 from spiral and twisted shape.

**[0019]** Whereas the rotary connector 40 is comprised of the primary connector 41 and the secondary connector 42. The connectors are built upon the existing connector set and can be turned radially in separate directions. The central outlet 12 of the reel notch 11 contain a casing 121 which comprises a pivot hole 122 to limit the primary connector 41; the internal of the secondary connector 42 is connected to the primary connector 41, and the external is connected to the water inlet terminal 21 of the gardening hose 20.

**[0020]** As shown in FIG. 5, the main frame 10 can be placed on a horizontal rotary frame 50, which comprises of a rear button to be placed on wall 60. As shown in FIGS. 6-7, the main frame 10 can rotate along pulling direction of the water outlet terminal 22 of the gardening hose 20 for smooth usage.

**[0021]** As shown in FIG. 8, the main frame 10 can also be comprised of front and rear frame 101 102. The opposite surfaces of the front and rear frames together form through holes 103 104 (as shown in FIG. 9) to stabilize the front and rear frames 101 102.